DATE=11/2/2005
PART NAME : ILC DESY 1.3GHZ RF CAVITY ASSEMBLY
REV NUMBER :
SER NUMBER :
STATS COUNT : 1

'Inspected by' : Robert Riley
'Cavity Number' : ACCEL 9 000 RUN 1

BEAM PIPE FLANGE NEAR

MM	DIM LOC1= LOCATION OF PLANE PL-NEAR-END-FLANGE					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	0.000	0.000	0.000	0.200	0.200	0.000
V	-0.000	-1.000	0.002			
FL	0.000	0.032	0.032	0.200	0.000	0.000

// MM	DIM PARL1= PARALLEL OF PLANE PL-NEAR-END-FLANGE,RFS TO WORKPLANE YMINUS EXTEND=0.000					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.218	0.218	0.200	0.000	0.018

DEG	DIM ANGL1= 3D ANGLE (COMPLEMENT) FROM PLANE PL-NEAR-END-FLANGE TO YAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	0.000	0.104	0.104	0.100	0.100	0.004

MM	DIM LOC2= LOCATION OF CIRCLE CR-NEAR-END -FLANGE					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.026	-0.027	0.200	0.200	0.000
Z	0.000	0.249	0.249	0.200	0.200	0.049
D	140.000	140.094	0.094	0.300	0.300	0.000
RN	0.000	0.009	0.009	0.200	0.000	0.000

BEAM PIPE FLANGE FAR

MM DIM LOC3= LOCATION OF PLANE PL-FAR-END

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	1283.400	1281.445	-1.955	3.000	3.000	0.000
V	0.003	1.000	0.003			
FL	0.000	0.053	0.053	0.200	0.000	0.000

// MM DIM PARL2= PARALLEL OF PLANE PL-FAR-END,RFS TO WORKPLANE YMINUS EXTEND=0.000

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.526	0.526	0.200	0.000	0.326

DEG DIM ANGL2= 3D ANGLE (COMPLEMENT) FROM PLANE PL-FAR-END TO YAXIS

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	0.000	0.240	0.240	0.100	0.100	0.140

MM DIM LOC4= LOCATION OF CIRCLE CR-FAR-END

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.158	0.158	0.200	0.200	0.000
Z	0.000	0.131	0.130	0.200	0.200	0.000
D	140.000	140.136	0.136	0.300	0.300	0.000
RN	0.000	0.011	0.011	0.200	0.000	0.000

DATUM-1-PLANE

MM DIM LOC-DATUM-1-PLANE= LOCATION OF PLANE PLC-DAT-1

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	128.800	129.077	0.277	0.200	0.200	0.077
V	-0.001	-1.000	0.003			
FL	0.000	0.048	0.048	0.200	0.000	0.000

// MM DIM PARL5= PARALLEL OF PLANE PLC-DAT-1,RFS TO WORKPLANE YMINUS EXTEND=0.000

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.352	0.352	0.200	0.000	0.152

DEG DIM ANGL7= 3D ANGLE (TRUE) FROM PLANE PLC-DAT-1 TO YAXIS

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	0.000	0.186	0.186	0.100	0.100	0.086

DATUM-2-PLANE

MM DIM LOC-DATUM-2-PLANE= LOCATION OF PLANE PLC-DAT-2

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	1190.000	1187.766	-2.234	0.200	0.200	2.034
V	-0.001	1.000	0.003			
FL	0.000	0.070	0.070	0.200	0.000	0.000

// MM	DIM PARL6= PARALLEL OF PLANE PLC-DAT-2,RFS TO WORKPLANE YMINUS EXTEND=0.000					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.357	0.357	0.200	0.000	0.157

DEG	DIM ANGL8= 3D ANGLE (TRUE) FROM PLANE PLC-DAT-2 TO YAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	0.000	0.180	0.180	0.100	0.100	0.080

PICKUP ANTENNA FLANGE NW8

MM	DIM LOC5= LOCATION OF PLANE PL-NW8-ANTENNA-FLANGE					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	-53.800	-53.635	0.165	0.200	0.200	0.000
V	-1.000	0.001	-0.001			
FL	0.000	0.002	0.002	0.200	0.000	0.000

// MM	DIM PARL3= PARALLEL OF PLANE PL-NW8-ANTENNA-FLANGE,RFS TO WORKPLANE XMINUS EXTEND=0.000					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.035	0.035	0.200	0.000	0.000

DEG	DIM ANGL3= 3D ANGLE (TRUE) FROM PLANE PL-NW8-ANTENNA-FLANGE TO XAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	0.000	0.074	0.074	0.100	0.100	0.000

MM	DIM LOC6= LOCATION OF CIRCLE CR-NW8-ANTENNA-FLANGE					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	96.600	96.719	0.119	0.200	0.200	0.000
Z	0.000	0.190	0.190	0.200	0.200	0.000
D	33.800	33.780	-0.020	0.150	0.000	0.020
RN	0.000	0.019	0.019	0.150	0.000	0.000

MAIN COUPLER FLANGE NW40

MM	DIM LOC7= LOCATION OF PLANE PL-NW-40-FLANGE					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	88.000	87.140	-0.860	0.200	0.200	0.660
V	1.000	-0.005	-0.001			
FL	0.000	0.002	0.002	0.200	0.000	0.000

// MM	DIM PARL4= PARALLEL OF PLANE PL-NW-40-FLANGE,RFS TO WORKPLANE XMINUS EXTEND=0.000					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.350	0.350	0.200	0.000	0.150

DEG	DIM ANGL4= 3D ANGLE (TRUE) FROM PLANE PL-NW-40-FLANGE TO XAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	0.000	0.320	0.320	0.100	0.100	0.220

MM	DIM LOC8= LOCATION OF CIRCLE CR-NW-40-FLANGE					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Y	1222.800	1220.027	-2.773	0.200	0.200	2.573
Z	0.000	0.446	0.446	0.200	0.200	0.246
D	76.000	75.988	-0.012	0.200	0.000	0.012
RN	0.000	0.024	0.024	0.200	0.000	0.000

MM	DIM DIST1= 2D DISTANCE FROM CIRCLE CR-NW-40-FLANGE TO PLANE PL-FAR-END PAR TO YAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	60.600	61.419	0.819	0.200	0.200	0.619

HOM-2 FLANGE NW12

MM	DIM FLAT4= FLATNESS OF PLANE PL-NW12-HOM-FLANGE					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	0.000	0.005	0.005	0.200	0.000	0.000

DEG	DIM ANGL5= 2D ANGLE (COMPLEMENT) FROM PLANE PL-NW12-HOM-FLANGE TO ZAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	15.000	18.322	3.322	0.500	0.500	2.822

DEG	DIM ANGL6= 2D ANGLE (TRUE) FROM PLANE PL-NW12-HOM-FLANGE TO ZAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	35.000	35.589	0.589	0.500	0.500	0.089

MM	DIM LOC9= LOCATION OF CIRCLE CR-NW12-HOM-FLANGE					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-72.223	-72.223	100.000	100.000	0.000
Y	0.000	1224.315	1224.315	2000.000	2000.000	0.000
Z	0.000	-9.091	-9.091	100.000	100.000	0.000
D	33.800	33.803	0.003	0.150	0.000	0.000
RN	0.000	0.035	0.035	0.150	0.000	0.000

HOM 1 LOCATION

MM	DIM LOC-HOM1= LOCATION OF CYLINDER CY-HOM-1					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	68.524	68.524	100.000	100.000	0.000
Y	96.600	96.511	-0.089	0.200	0.200	0.000
Z	0.000	-40.037	-40.037	100.000	100.000	0.000
D	44.000	43.862	-0.138	0.000	0.100	0.038
RN	0.000	0.066	0.066	0.100	0.000	0.000
V	-0.864	-0.001	0.503			

DEG	DIM ANGL9= 3D ANGLE (COMPLEMENT) FROM CYLINDER CY-HOM-1 TO XAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	30.000	30.206	0.206	0.500	0.500	0.000

DEG	DIM ANGL10= 3D ANGLE (TRUE) FROM CYLINDER CY-HOM-1 TO YAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	90.000	89.922	-0.078	0.500	0.500	0.000

DEG	DIM ANGL11= 3D ANGLE (TRUE) FROM CYLINDER CY-HOM-1 TO ZAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	60.000	59.795	-0.205	0.500	0.500	0.000

MM	DIM LOC-HOM3= LOCATION OF POINT PT-RT-HOM-1					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
PR	116.000	115.882	-0.118	0.200	0.200	0.000

INTERSECTION OF HOM1 & YZ PLANE

MM	DIM LOC-HOM1 X PLANE= LOCATION OF POINT PTC-HOM1 X YZ PLANE					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.000	0.000	0.200	0.200	0.000
Y	96.600	96.403	-0.197	0.200	0.200	0.000
Z	0.000	-0.146	-0.146	0.200	0.200	0.000

HOM 2 LOCATION

MM	DIM LOC-HOM2= LOCATION OF CYLINDER CY-HOM-2					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-64.461	-64.461	100.000	100.000	0.000
Y	1222.800	1220.910	-1.890	3.000	3.000	0.000
Z	0.000	-45.643	-45.643	100.000	100.000	0.000
D	44.000	43.873	-0.127	0.000	0.100	0.027
RN	0.000	0.057	0.057	0.100	0.000	0.000
V	-0.816	0.003	-0.579			

MM	DIM DIST2= 2D DISTANCE FROM POINT PT-HOM-2 TO PLANE PL-FAR-END PAR TO YAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
M	60.600	60.287	-0.313	0.200	0.200	0.113

DEG	DIM ANGL12= 3D ANGLE (TRUE) FROM CYLINDER CY-HOM-2 TO XAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	35.000	35.350	0.350	0.500	0.500	0.000

DEG	DIM ANGL13= 3D ANGLE (COMPLEMENT) FROM CYLINDER CY-HOM-2 TO YAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	90.000	90.171	0.171	0.500	0.500	0.000

DEG	DIM ANGL14= 3D ANGLE (TRUE) FROM CYLINDER CY-HOM-2 TO ZAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	55.000	54.650	-0.350	0.500	0.500	0.000

MM	DIM LOC-HOM4= LOCATION OF POINT PT-HOM-2					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
PR	116.000	115.629	-0.371	0.200	0.200	0.171

INTERSECTION OF HOM2 & YZ PLANE

MM	DIM LOC-HOM2 X PLANE= LOCATION OF POINT PTC-HOM2 X YZ PLANE					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.000	0.000	0.200	0.200	0.000
Y	1222.800	1220.674	-2.126	3.000	3.000	0.000
Z	0.000	0.083	0.083	0.200	0.200	0.000

LOCATIONS OF CONSTRUCTED CIRCLES
ON 18 HALF CELLS & 2 DATUM SURFACES & 2 VACUUM SURFACES

MM	DIM LOC-CC1= LOCATION OF CIRCLE CRC-DAT-1					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.000	0.000	0.200	0.200	0.000
Y	0.000	130.891	130.891	2000.000	2000.000	0.000
Z	0.000	0.000	0.000	0.200	0.200	0.000
D	111.000	110.893	-0.106	0.200	0.200	0.000
RN	0.000	0.026	0.026	0.200	0.000	0.000

MM DIM LOC-CC2= LOCATION OF CIRCLE CRC-VAC-1

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.038	0.038	0.200	0.200	0.000
Y	0.000	158.702	158.702	2000.000	2000.000	0.000
Z	0.000	-0.100	-0.100	0.200	0.200	0.000
D	191.200	191.174	-0.026	0.200	0.200	0.000
RN	0.000	0.051	0.051	0.200	0.000	0.000

MM DIM LOC-CC3= LOCATION OF CIRCLE CRC-CAV-1-1

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.058	0.058	0.200	0.200	0.000
Y	0.000	193.954	193.954	2000.000	2000.000	0.000
Z	0.000	-0.259	-0.259	0.200	0.200	0.059
D	210.300	210.601	0.301	0.200	0.200	0.101
RN	0.000	0.147	0.147	0.200	0.000	0.000

MM DIM LOC-CC4= LOCATION OF CIRCLE CRC-CAV-1-2

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.065	0.065	0.200	0.200	0.000
Y	0.000	203.013	203.013	2000.000	2000.000	0.000
Z	0.000	-0.259	-0.259	0.200	0.200	0.059
D	210.300	210.584	0.283	0.200	0.200	0.083
RN	0.000	0.120	0.120	0.200	0.000	0.000

MM DIM LOC-CC5= LOCATION OF CIRCLE CRC-CAV-2-1

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.110	0.110	0.200	0.200	0.000
Y	0.000	309.080	309.080	2000.000	2000.000	0.000
Z	0.000	-0.518	-0.518	0.200	0.200	0.318
D	210.300	210.664	0.364	0.200	0.200	0.164
RN	0.000	0.124	0.124	0.200	0.000	0.000

MM DIM LOC-CC6= LOCATION OF CIRCLE CRC-CAV-2-2

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.063	0.063	0.200	0.200	0.000
Y	0.000	318.250	318.250	2000.000	2000.000	0.000
Z	0.000	-0.530	-0.530	0.200	0.200	0.330
D	210.300	210.517	0.217	0.200	0.200	0.017
RN	0.000	0.225	0.225	0.200	0.000	0.025

MM DIM LOC-CC7= LOCATION OF CIRCLE CRC-CAV-3-1

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.083	0.082	0.200	0.200	0.000
Y	0.000	424.363	424.363	2000.000	2000.000	0.000
Z	0.000	-0.713	-0.713	0.200	0.200	0.513
D	210.300	210.642	0.341	0.200	0.200	0.141
RN	0.000	0.173	0.173	0.200	0.000	0.000

MM DIM LOC-CC8= LOCATION OF CIRCLE CRC-CAV-3-2

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.087	0.087	0.200	0.200	0.000
Y	0.000	433.323	433.323	2000.000	2000.000	0.000
Z	0.000	-0.859	-0.859	0.200	0.200	0.659
D	210.300	210.601	0.301	0.200	0.200	0.101
RN	0.000	0.157	0.157	0.200	0.000	0.000

MM DIM LOC-CC9= LOCATION OF CIRCLE CRC-CAV-4-1

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.089	0.089	0.200	0.200	0.000
Y	0.000	539.499	539.499	2000.000	2000.000	0.000
Z	0.000	-0.986	-0.986	0.200	0.200	0.786
D	210.300	210.614	0.314	0.200	0.200	0.114
RN	0.000	0.149	0.149	0.200	0.000	0.000

MM DIM LOC-CC10= LOCATION OF CIRCLE CRC-CAV-4-2

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.112	0.112	0.200	0.200	0.000
Y	0.000	548.928	548.928	2000.000	2000.000	0.000
Z	0.000	-1.027	-1.027	0.200	0.200	0.827
D	210.300	210.531	0.231	0.200	0.200	0.031
RN	0.000	0.158	0.158	0.200	0.000	0.000

MM DIM LOC-CC11= LOCATION OF CIRCLE CRC-CAV-5-1

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.135	0.135	0.200	0.200	0.000
Y	0.000	654.656	654.656	2000.000	2000.000	0.000
Z	0.000	-1.040	-1.040	0.200	0.200	0.840
D	210.300	210.621	0.321	0.200	0.200	0.121
RN	0.000	0.150	0.150	0.200	0.000	0.000

MM DIM LOC-CC12= LOCATION OF CIRCLE CRC-CAV-5-2

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.174	0.174	0.200	0.200	0.000
Y	0.000	663.956	663.956	2000.000	2000.000	0.000
Z	0.000	-1.052	-1.052	0.200	0.200	0.852
D	210.300	210.600	0.300	0.200	0.200	0.100
RN	0.000	0.221	0.221	0.200	0.000	0.021

MM DIM LOC-CC13= LOCATION OF CIRCLE CRC-CAV-6-1

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.173	0.173	0.200	0.200	0.000
Y	0.000	769.859	769.859	2000.000	2000.000	0.000
Z	0.000	-0.989	-0.989	0.200	0.200	0.789
D	210.300	210.582	0.282	0.200	0.200	0.082
RN	0.000	0.176	0.176	0.200	0.000	0.000

MM DIM LOC-CC14= LOCATION OF CIRCLE CRC-CAV-6-2

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.145	0.145	0.200	0.200	0.000
Y	0.000	779.410	779.410	2000.000	2000.000	0.000
Z	0.000	-0.986	-0.986	0.200	0.200	0.786
D	210.300	210.531	0.231	0.200	0.200	0.031
RN	0.000	0.225	0.225	0.200	0.000	0.025

MM DIM LOC-CC15= LOCATION OF CIRCLE CRC-CAV-7-1

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.141	0.141	0.200	0.200	0.000
Y	0.000	884.991	884.991	2000.000	2000.000	0.000
Z	0.000	-0.867	-0.867	0.200	0.200	0.667
D	210.300	210.641	0.340	0.200	0.200	0.140
RN	0.000	0.251	0.251	0.200	0.000	0.051

MM DIM LOC-CC16= LOCATION OF CIRCLE CRC-CAV-7-2

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.071	0.071	0.200	0.200	0.000
Y	0.000	894.228	894.228	2000.000	2000.000	0.000
Z	0.000	-0.820	-0.820	0.200	0.200	0.620
D	210.300	210.527	0.227	0.200	0.200	0.027
RN	0.000	0.132	0.132	0.200	0.000	0.000

MM DIM LOC-CC17= LOCATION OF CIRCLE CRC-CAV-8-1

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.094	0.094	0.200	0.200	0.000
Y	0.000	1000.348	1000.348	2000.000	2000.000	0.000
Z	0.000	-0.605	-0.606	0.200	0.200	0.406
D	210.300	210.720	0.420	0.200	0.200	0.220
RN	0.000	0.138	0.138	0.200	0.000	0.000

MM DIM LOC-CC18= LOCATION OF CIRCLE CRC-CAV-8-2

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.051	0.051	0.200	0.200	0.000
Y	0.000	1009.104	1009.104	2000.000	2000.000	0.000
Z	0.000	-0.556	-0.556	0.200	0.200	0.356
D	210.300	210.612	0.312	0.200	0.200	0.112
RN	0.000	0.197	0.197	0.200	0.000	0.000

MM DIM LOC-CC19= LOCATION OF CIRCLE CRC-CAV-9-1

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.111	0.111	0.200	0.200	0.000
Y	0.000	1115.357	1115.357	2000.000	2000.000	0.000
Z	0.000	-0.285	-0.285	0.200	0.200	0.085
D	210.300	210.651	0.351	0.200	0.200	0.151
RN	0.000	0.097	0.097	0.200	0.000	0.000

MM DIM LOC-CC20= LOCATION OF CIRCLE CRC-CAV-9-2

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.108	0.108	0.200	0.200	0.000
Y	0.000	1124.528	1124.528	2000.000	2000.000	0.000
Z	0.000	-0.313	-0.313	0.200	0.200	0.113
D	210.300	210.479	0.179	0.200	0.200	0.000
RN	0.000	0.145	0.145	0.200	0.000	0.000

MM DIM LOC-CC21= LOCATION OF CIRCLE CRC-VAC-2

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.047	0.047	0.200	0.200	0.000
Y	0.000	1156.165	1156.165	2000.000	2000.000	0.000
Z	0.000	-0.079	-0.080	0.200	0.200	0.000
D	200.000	199.985	-0.016	0.200	0.200	0.000
RN	0.000	0.104	0.104	0.200	0.000	0.000

MM DIM LOC-CC22= LOCATION OF CIRCLE CRC-DAT-2

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.000	0.000	0.200	0.200	0.000
Y	0.000	1185.579	1185.579	2000.000	2000.000	0.000
Z	0.000	0.000	0.000	0.200	0.200	0.000
D	111.000	110.878	-0.122	0.200	0.200	0.000
RN	0.000	0.021	0.021	0.200	0.000	0.000

TRUE POSITIONS OF CONSTRUCTED CIRCLES
ON 18 HALF CELLS & 2 DATUM SURFACES & 2 VACUUM SURFACES

MM DIM LOC-TP-CC1= TRUE POSITION OF CIRCLE CRC-DAT-1

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.000	0.000				
Z	0.000	0.000	0.000				
TP	RFS		0.000	0.200		0.000	0.000

MM DIM LOC-TP-CC2= TRUE POSITION OF CIRCLE CRC-VAC-1

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.038	0.038				
Z	0.000	-0.100	-0.100				
TP	RFS		0.215	0.200		0.000	0.015

MM DIM LOC-TP-CC3= TRUE POSITION OF CIRCLE CRC-CAV-1-1

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.058	0.058				
Z	0.000	-0.259	-0.259				
TP	RFS		0.531	0.200		0.000	0.331

⊕ MM	DIM LOC-TP-CC4= TRUE POSITION OF CIRCLE CRC-CAV-1-2						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.065	0.065				
Z	0.000	-0.259	-0.259				
TP	RFS		0.533	0.200		0.000	0.333

⊕ MM	DIM LOC-TP-CC5= TRUE POSITION OF CIRCLE CRC-CAV-2-1						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.110	0.110				
Z	0.000	-0.518	-0.518				
TP	RFS		1.059	0.200		0.000	0.859

⊕ MM	DIM LOC-TP-CC6= TRUE POSITION OF CIRCLE CRC-CAV-2-2						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.063	0.063				
Z	0.000	-0.530	-0.530				
TP	RFS		1.067	0.200		0.000	0.867

⊕ MM	DIM LOC-TP-CC7= TRUE POSITION OF CIRCLE CRC-CAV-3-1						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.083	0.082				
Z	0.000	-0.713	-0.713				
TP	RFS		1.435	0.200		0.000	1.235

⊕ MM	DIM LOC-TP-CC8= TRUE POSITION OF CIRCLE CRC-CAV-3-2						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.087	0.087				
Z	0.000	-0.859	-0.859				
TP	RFS		1.726	0.200		0.000	1.526

⊕ MM	DIM LOC-TP-CC9= TRUE POSITION OF CIRCLE CRC-CAV-4-1						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.089	0.089				
Z	0.000	-0.986	-0.986				
TP	RFS		1.980	0.200		0.000	1.780

⊕ MM	DIM LOC-TP-CC10= TRUE POSITION OF CIRCLE CRC-CAV-4-2						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.112	0.112				
Z	0.000	-1.027	-1.027				
TP	RFS		2.065	0.200		0.000	1.865

⊕ MM	DIM LOC-TP-CC11= TRUE POSITION OF CIRCLE CRC-CAV-5-1						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.135	0.135				
Z	0.000	-1.040	-1.040				
TP	RFS		2.098	0.200		0.000	1.898

⊕ MM DIM LOC-TP-CC12= TRUE POSITION OF CIRCLE CRC-CAV-5-2

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL	
X	0.000	0.174	0.174					
Z	0.000	-1.052	-1.052					
TP	RFS		2.133	0.200		0.000	1.933	

⊕ MM DIM LOC-TP-CC13= TRUE POSITION OF CIRCLE CRC-CAV-6-1

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL	
X	0.000	0.173	0.173					
Z	0.000	-0.989	-0.989					
TP	RFS		2.007	0.200		0.000	1.807	

⊕ MM DIM LOC-TP-CC14= TRUE POSITION OF CIRCLE CRC-CAV-6-2

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL	
X	0.000	0.145	0.145					
Z	0.000	-0.986	-0.986					
TP	RFS		1.994	0.200		0.000	1.794	

⊕ MM DIM LOC-TP-CC15= TRUE POSITION OF CIRCLE CRC-CAV-7-1

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL	
X	0.000	0.141	0.141					
Z	0.000	-0.867	-0.867					
TP	RFS		1.757	0.200		0.000	1.557	

⊕ MM DIM LOC-TP-CC16= TRUE POSITION OF CIRCLE CRC-CAV-7-2

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL	
X	0.000	0.071	0.071					
Z	0.000	-0.820	-0.820					
TP	RFS		1.645	0.200		0.000	1.445	

⊕ MM DIM LOC-TP-CC17= TRUE POSITION OF CIRCLE CRC-CAV-8-1

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL	
X	0.000	0.094	0.094					
Z	0.000	-0.605	-0.606					
TP	RFS		1.226	0.200		0.000	1.026	

⊕ MM DIM LOC-TP-CC18= TRUE POSITION OF CIRCLE CRC-CAV-8-2

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL	
X	0.000	0.051	0.051					
Z	0.000	-0.556	-0.556					
TP	RFS		1.118	0.200		0.000	0.918	

⊕ MM DIM LOC-TP-CC19= TRUE POSITION OF CIRCLE CRC-CAV-9-1

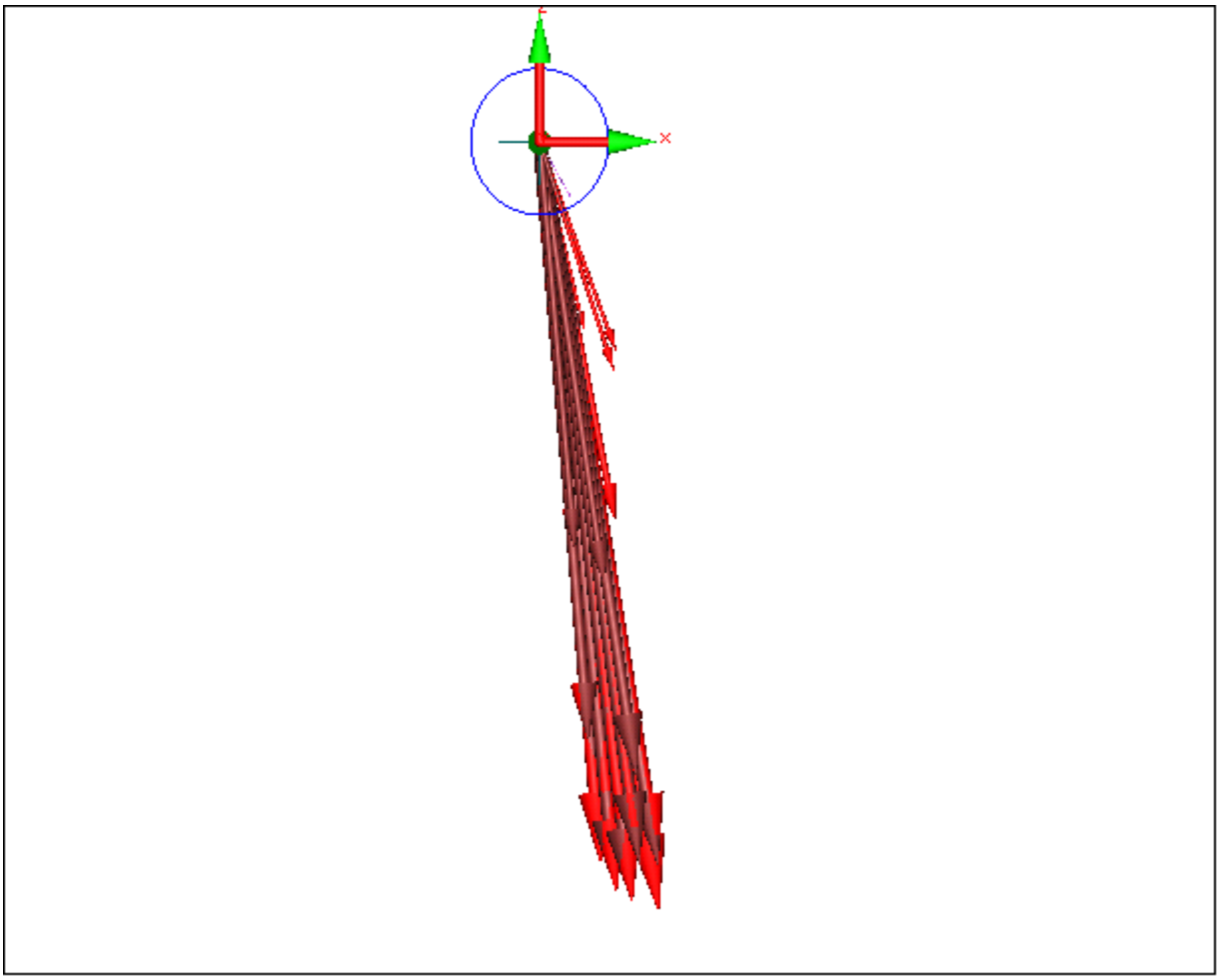
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL	
X	0.000	0.111	0.111					
Z	0.000	-0.285	-0.285					
TP	RFS		0.612	0.200		0.000	0.412	

MM	DIM LOC-TP-CC20= TRUE POSITION OF CIRCLE CRC-CAV-9-2						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.108	0.108				
Z	0.000	-0.313	-0.313				
TP	RFS		0.663	0.200		0.000	0.463

MM	DIM LOC-TP-CC21= TRUE POSITION OF CIRCLE CRC-VAC-2						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.047	0.047				
Z	0.000	-0.079	-0.080				
TP	RFS		0.185	0.200		0.000	0.000

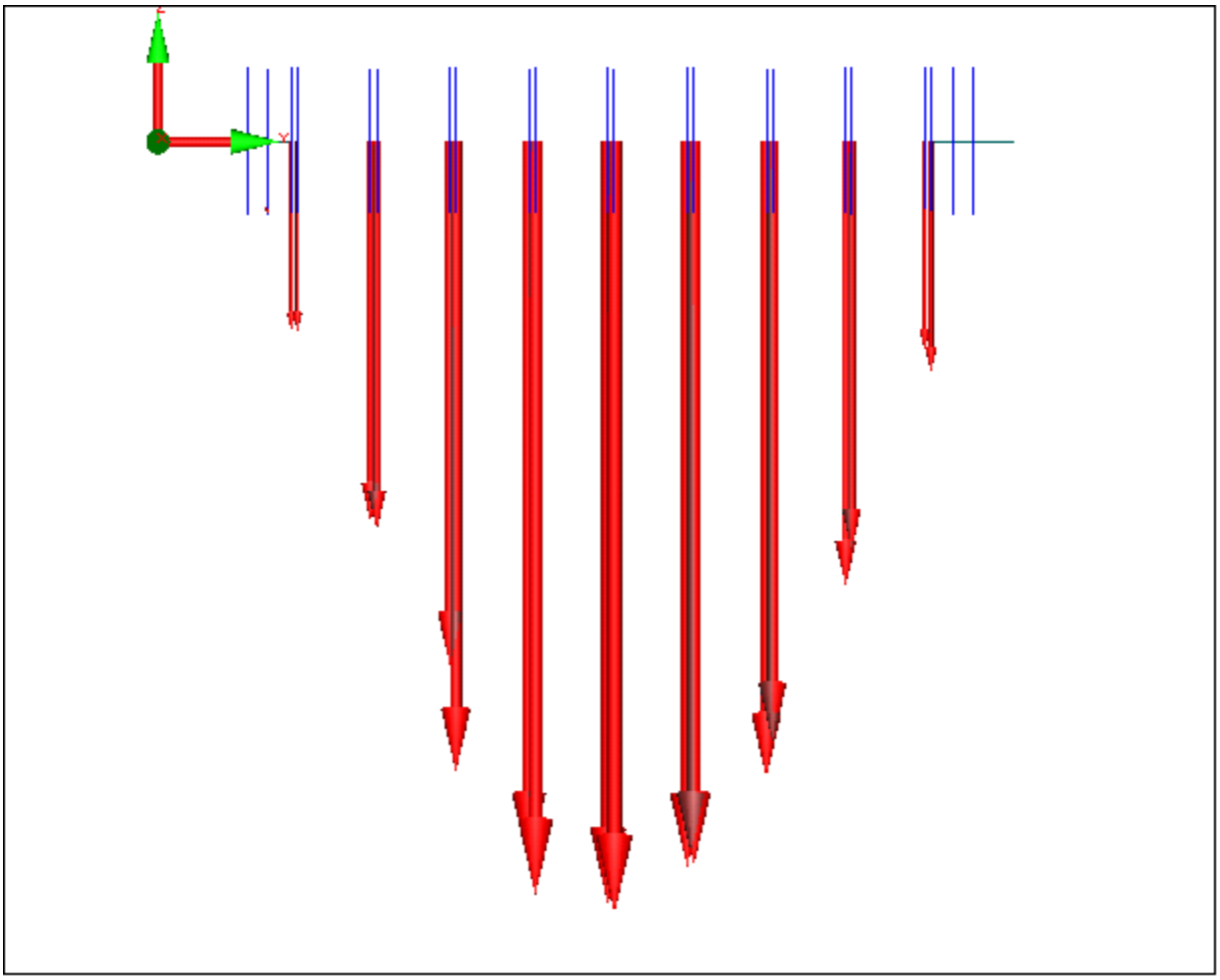
MM	DIM LOC-TP-CC22= TRUE POSITION OF CIRCLE CRC-DAT-2						
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	BONUS	OUTTOL
X	0.000	0.000	0.000				
Z	0.000	0.000	0.000				
TP	RFS		0.000	0.200		0.000	0.000

True Position plots from 3 views
x1000

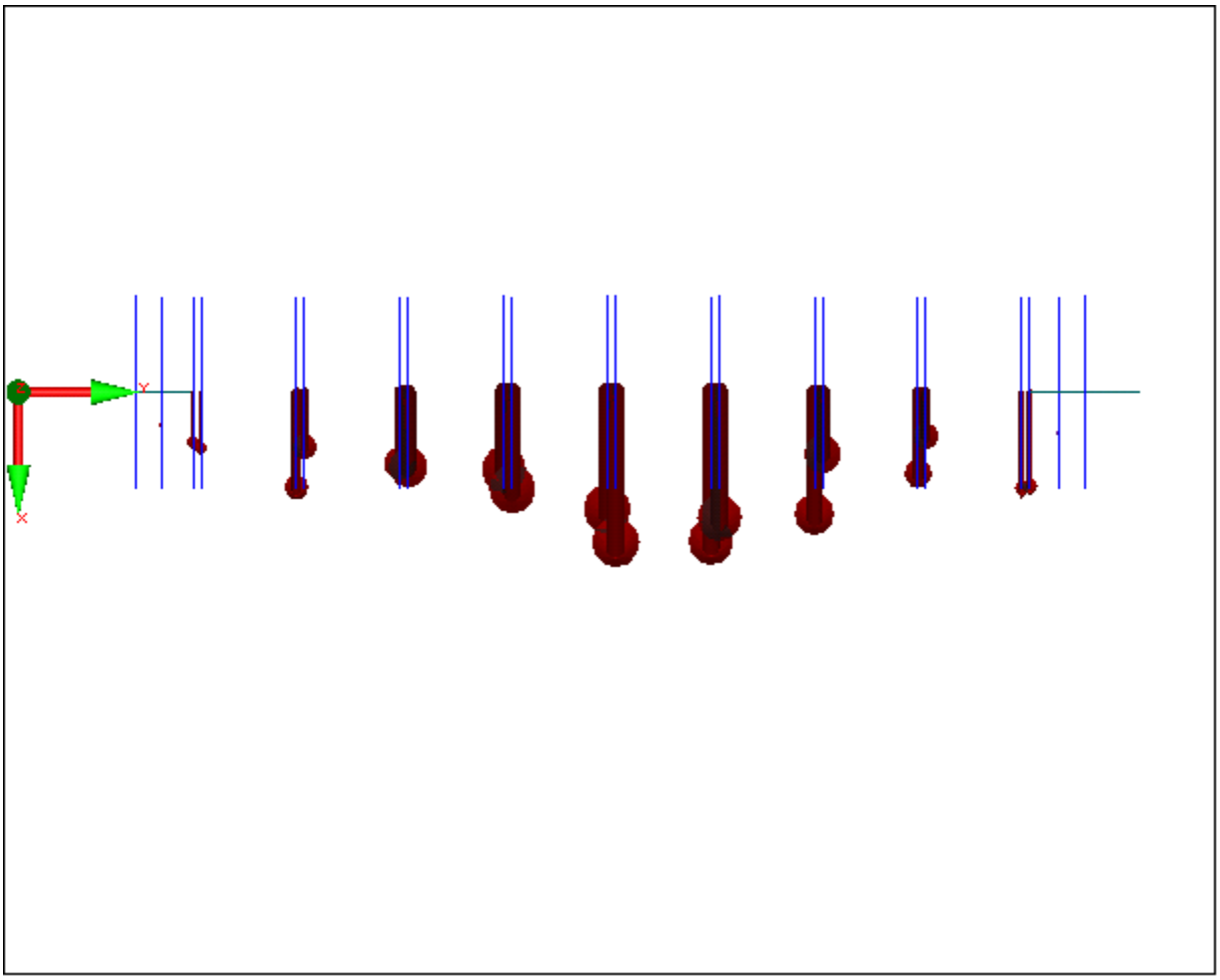


-Y View

x1000



+X View
x1000



+Z View
x1000

MM	DIM LOC-BEST FIT CONSTRUCTED LINE= LOCATION OF LINE LNC-BEST-FIT					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.089	0.089	0.200	0.200	0.000
Y	0.000	659.008	659.008	2000.000	2000.000	0.000
Z	0.000	-0.584	-0.584	0.200	0.200	0.384
ST	0.000	1.086	1.086	0.200	0.000	0.886

SUPPORT RING CIRCLE LOCATIONS

MM	DIM LOC-SUPPORT RING-1= LOCATION OF CIRCLE CR-SUPPORT-RING-T12					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.044	0.043	0.200	0.200	0.000
Y	0.000	256.524	256.524	2000.000	2000.000	0.000
Z	0.000	-0.372	-0.372	0.200	0.200	0.172
R	56.500	56.361	-0.139	0.200	0.200	0.000
RN	0.000	0.055	0.055	0.200	0.000	0.000

MM DIM LOC-SUPPORT RING-2= LOCATION OF CIRCLE CR-SUPPORT-RING-T23

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.162	0.161	0.200	0.200	0.000
Y	0.000	371.854	371.854	2000.000	2000.000	0.000
Z	0.000	-0.658	-0.658	0.200	0.200	0.458
R	56.500	56.414	-0.086	0.200	0.200	0.000
RN	0.000	0.015	0.015	0.200	0.000	0.000

MM DIM LOC-SUPPORT RING-3= LOCATION OF CIRCLE CR-SUPPORT-RING-T34

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.127	0.127	0.200	0.200	0.000
Y	0.000	487.184	487.184	2000.000	2000.000	0.000
Z	0.000	-0.928	-0.928	0.200	0.200	0.728
R	56.500	56.323	-0.177	0.200	0.200	0.000
RN	0.000	0.006	0.006	0.200	0.000	0.000

MM DIM LOC-SUPPORT RING-4= LOCATION OF CIRCLE CR-SUPPORT-RING-T45

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.111	0.110	0.200	0.200	0.000
Y	0.000	602.513	602.513	2000.000	2000.000	0.000
Z	0.000	-1.002	-1.002	0.200	0.200	0.802
R	56.500	56.340	-0.160	0.200	0.200	0.000
RN	0.000	0.022	0.022	0.200	0.000	0.000

MM DIM LOC-SUPPORT RING-5= LOCATION OF CIRCLE CR-SUPPORT-RING-T56

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.235	0.235	0.200	0.200	0.035
Y	0.000	717.620	717.620	2000.000	2000.000	0.000
Z	0.000	-0.943	-0.943	0.200	0.200	0.743
R	56.500	56.323	-0.177	0.200	0.200	0.000
RN	0.000	0.023	0.023	0.200	0.000	0.000

MM DIM LOC-SUPPORT RING-6= LOCATION OF CIRCLE CR-SUPPORT-RING-T67

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.235	0.235	0.200	0.200	0.035
Y	0.000	832.818	832.818	2000.000	2000.000	0.000
Z	0.000	-0.904	-0.904	0.200	0.200	0.704
R	56.500	56.268	-0.232	0.200	0.200	0.032
RN	0.000	0.021	0.021	0.200	0.000	0.000

MM DIM LOC-SUPPORT RING-7= LOCATION OF CIRCLE CR-SUPPORT-RING-T78

AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.042	0.041	0.200	0.200	0.000
Y	0.000	948.216	948.216	2000.000	2000.000	0.000
Z	0.000	-0.531	-0.531	0.200	0.200	0.331
R	56.500	56.286	-0.214	0.200	0.200	0.014
RN	0.000	0.040	0.040	0.200	0.000	0.000

MM	DIM LOC-SUPPORT RING-8= LOCATION OF CIRCLE CR-SUPPORT-RING-T89					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	0.081	0.081	0.200	0.200	0.000
Y	0.000	1063.518	1063.518	2000.000	2000.000	0.000
Z	0.000	-0.180	-0.180	0.200	0.200	0.000
R	56.500	56.355	-0.145	0.200	0.200	0.000
RN	0.000	0.048	0.048	0.200	0.000	0.000

SUPPORT RING POINT LOCATIONS

MM	DIM LOC-SUPPORT RING-PT1= LOCATION OF POINT PT-SUPPORT-RING-T12					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.020	-0.020	0.200	0.200	0.000
Y	0.000	250.618	250.618	2000.000	2000.000	0.000
Z	56.500	55.979	-0.521	0.200	0.200	0.321

MM	DIM LOC-SUPPORT RING-PT2= LOCATION OF POINT PT-SUPPORT-RING-T23					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.020	-0.020	0.200	0.200	0.000
Y	365.887	365.948	0.061	2000.000	2000.000	0.000
Z	56.500	55.740	-0.760	0.200	0.200	0.560

MM	DIM LOC-SUPPORT RING-PT3= LOCATION OF POINT PT-SUPPORT-RING-T34					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.020	-0.020	0.200	0.200	0.000
Y	0.000	480.278	480.278	2000.000	2000.000	0.000
Z	56.500	55.413	-1.087	0.200	0.200	0.887

MM	DIM LOC-SUPPORT RING-PT4= LOCATION OF POINT PT-SUPPORT-RING-T45					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.020	-0.020	0.200	0.200	0.000
Y	0.000	595.608	595.608	2000.000	2000.000	0.000
Z	56.500	55.303	-1.197	0.200	0.200	0.997

MM	DIM LOC-SUPPORT RING-PT5= LOCATION OF POINT PT-SUPPORT-RING-T56					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.020	-0.020	0.200	0.200	0.000
Y	0.000	710.618	710.618	2000.000	2000.000	0.000
Z	56.500	55.298	-1.202	0.200	0.200	1.002

MM	DIM LOC-SUPPORT RING-PT6= LOCATION OF POINT PT-SUPPORT-RING-T67					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.020	-0.020	0.200	0.200	0.000
Y	0.000	825.918	825.918	2000.000	2000.000	0.000
Z	56.500	55.389	-1.111	0.200	0.200	0.911

MM	DIM LOC-SUPPORT RING-PT7= LOCATION OF POINT PT-SUPPORT-RING-T78					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.020	-0.020	0.200	0.200	0.000
Y	0.000	941.218	941.218	2000.000	2000.000	0.000
Z	56.500	55.694	-0.806	0.200	0.200	0.606

MM	DIM LOC-SUPPORT RING-PT8= LOCATION OF POINT PT-SUPPORT-RING-T89					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
X	0.000	-0.021	-0.021	0.200	0.200	0.000
Y	0.000	1056.618	1056.618	2000.000	2000.000	0.000
Z	56.500	56.113	-0.387	0.200	0.200	0.187

SUPPORT RING CIRCLES IN Z

MM	DIM LOC Z SUPPORT RING CIRCLES 1= LOCATION OF CIRCLE CR-SUPPORT-RING-T1					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Z	0.000	-0.372	-0.372	0.200	0.200	0.172

MM	DIM LOC Z SUPPORT RING CIRCLES 2= LOCATION OF CIRCLE CR-SUPPORT-RING-T2					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Z	0.000	-0.658	-0.658	0.200	0.200	0.458

MM	DIM LOC Z SUPPORT RING CIRCLES 3= LOCATION OF CIRCLE CR-SUPPORT-RING-T3					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Z	0.000	-0.928	-0.928	0.200	0.200	0.728

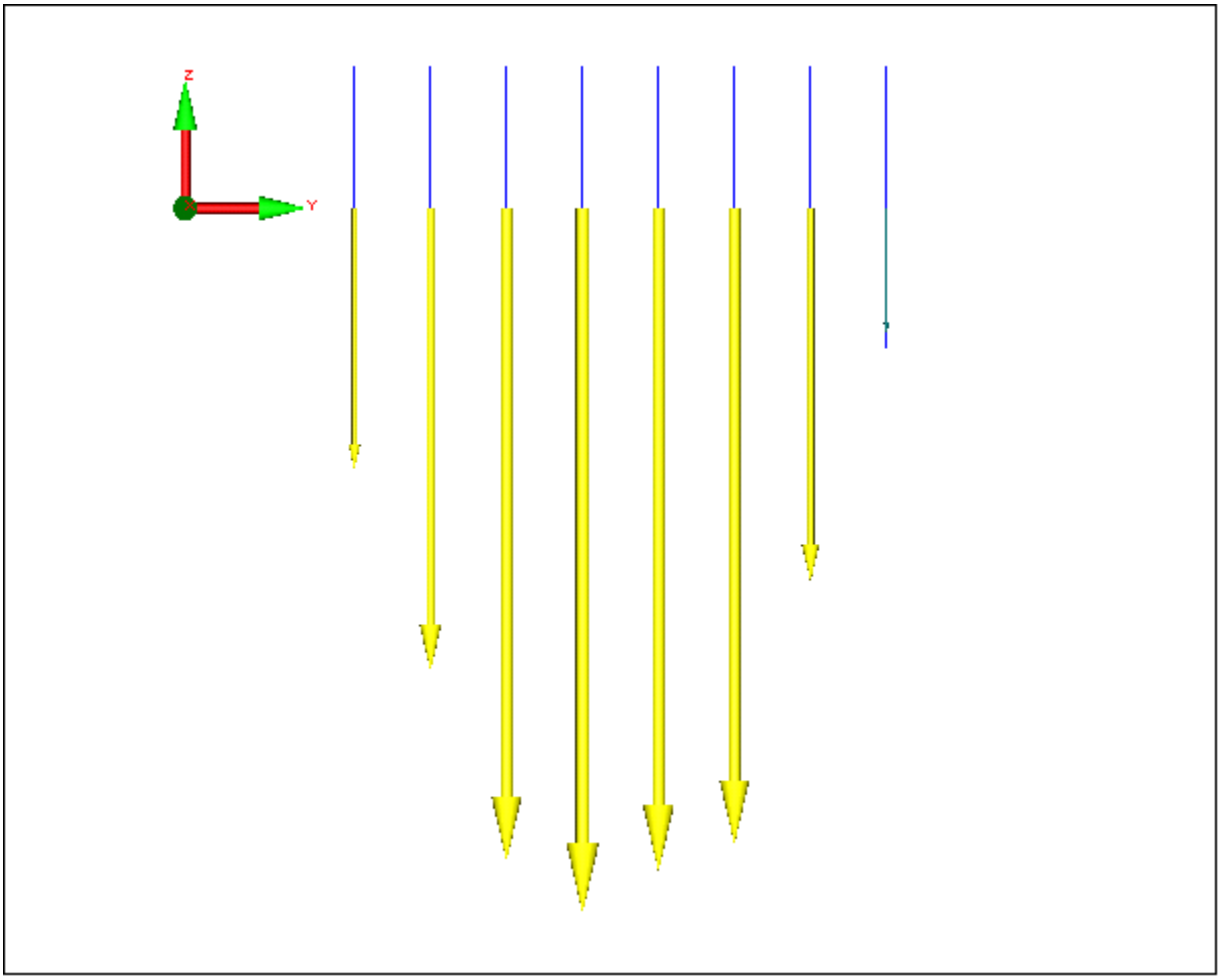
MM	DIM LOC Z SUPPORT RING CIRCLES 4= LOCATION OF CIRCLE CR-SUPPORT-RING-T4					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Z	0.000	-1.002	-1.002	0.200	0.200	0.802

MM	DIM LOC Z SUPPORT RING CIRCLES 5= LOCATION OF CIRCLE CR-SUPPORT-RING-T5					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Z	0.000	-0.943	-0.943	0.200	0.200	0.743

MM	DIM LOC Z SUPPORT RING CIRCLES 6= LOCATION OF CIRCLE CR-SUPPORT-RING-T6					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Z	0.000	-0.904	-0.904	0.200	0.200	0.704

MM	DIM LOC Z SUPPORT RING CIRCLES 7= LOCATION OF CIRCLE CR-SUPPORT-RING-T7					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Z	0.000	-0.531	-0.531	0.200	0.200	0.331

MM	DIM LOC Z SUPPORT RING CIRCLES 8= LOCATION OF CIRCLE CR-SUPPORT-RING-T8					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Z	0.000	-0.180	-0.180	0.200	0.200	0.000



SUPPORT RING CIRCLES IN Z
x1000

SUPPORT RING POINTS IN Z

MM	DIM LOC Z SUPPORT RING POINTS 1= LOCATION OF POINT PT-SUPPORT-RING-T12					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Z	56.500	55.979	-0.521	0.200	0.200	0.321

MM	DIM LOC Z SUPPORT RING POINTS 2= LOCATION OF POINT PT-SUPPORT-RING-T23					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Z	56.500	55.740	-0.760	0.200	0.200	0.560

MM	DIM LOC Z SUPPORT RING POINTS 3= LOCATION OF POINT PT-SUPPORT-RING-T34					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Z	56.500	55.413	-1.087	0.200	0.200	0.887

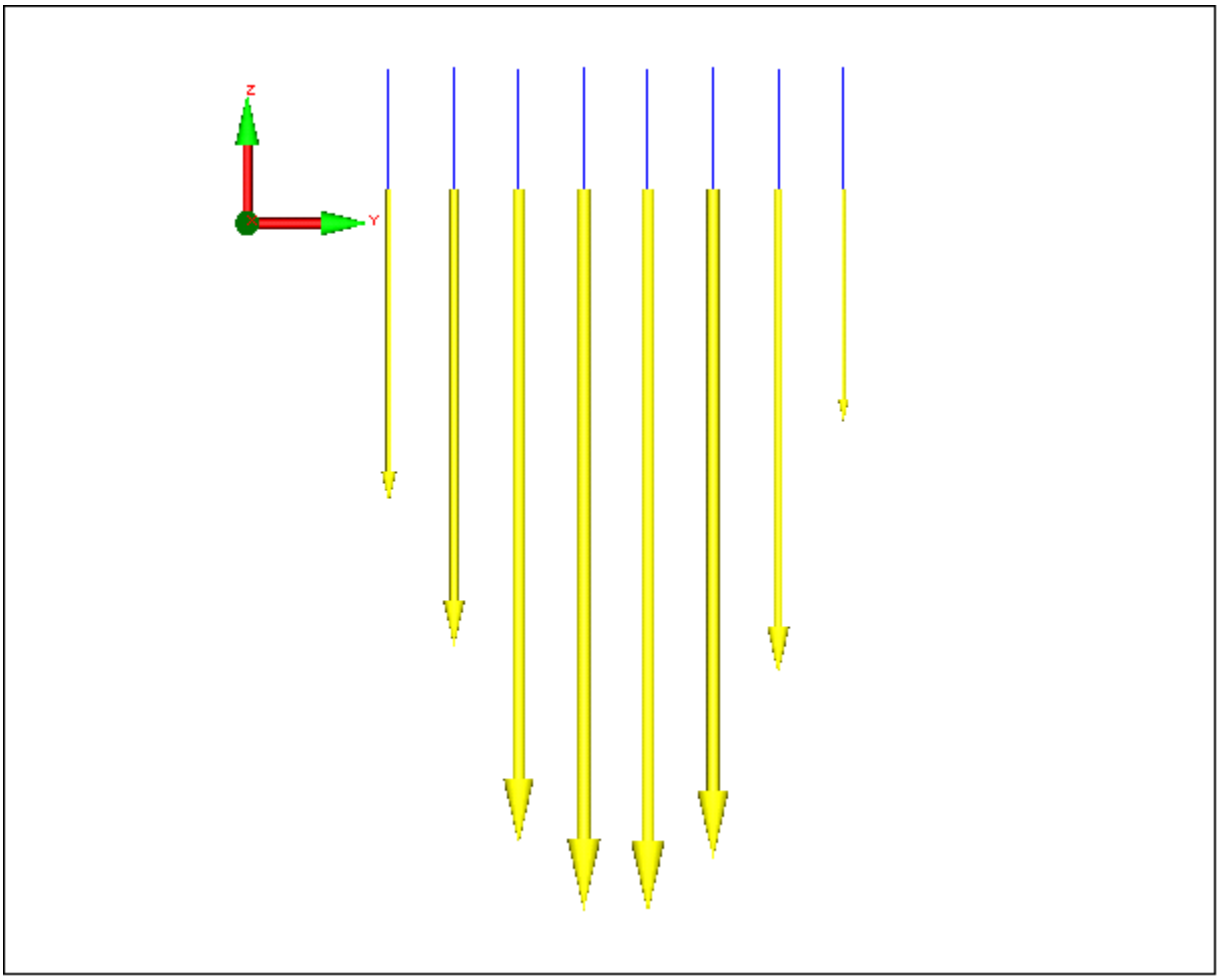
MM	DIM LOC Z SUPPORT RING POINTS 4= LOCATION OF POINT PT-SUPPORT-RING-T45					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Z	56.500	55.303	-1.197	0.200	0.200	0.997

MM	DIM LOC Z SUPPORT RING POINTS 5= LOCATION OF POINT PT-SUPPORT-RING-T56					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Z	56.500	55.298	-1.202	0.200	0.200	1.002

MM	DIM LOC Z SUPPORT RING POINTS 6= LOCATION OF POINT PT-SUPPORT-RING-T67					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Z	56.500	55.389	-1.111	0.200	0.200	0.911

MM	DIM LOC Z SUPPORT RING POINTS 7= LOCATION OF POINT PT-SUPPORT-RING-T78					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Z	56.500	55.694	-0.806	0.200	0.200	0.606

MM	DIM LOC Z SUPPORT RING POINTS 8= LOCATION OF POINT PT-SUPPORT-RING-T89					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
Z	56.500	56.113	-0.387	0.200	0.200	0.187



SUPPORT RING POINTS IN Z
x1000

DEG	DIM ANGL15= 2D ANGLE (TRUE) FROM LINE LNC-FOR 180 OFFSET TO ZAXIS					
AX	NOMINAL	MEAS	DEV	+TOL	-TOL	OUTTOL
A	15.000	15.255	0.255	0.500	0.500	0.000

(9) ANGLE I: 0.2631146 - 15.25495207
ANGLE K: 0.9647646
(7) ANGLE I: 0.2588121 - 14.99958804
ANGLE K: 0.9659277
(6) ANGLE I: 0.2439225 - 14.11816578
ANGLE K: 0.9697947

END OF MEASUREMENT FOR
PN=ILC DESY 1.3GHZ RF CAVITY ASSEMBLY DWG= SN=
TOTAL # OF MEAS =291 # OUT OF TOL =119